

In the Claims

Please replace all prior versions and listings of claims in this application with the following list of claims:

1. (Currently Amended) A method of stimulating an immune response comprising administering an immunostimulatory nucleic acid that is a T-rich immunostimulatory nucleic acid to a non-rodent subject in an amount effective to induce an immune response in the non-rodent subject, wherein the T-rich immunostimulatory nucleic acid comprises



wherein $X_1 X_2$ is selected from the group consisting of TA, TG, TC, AT, AA, AG, AC, CT, CC, CA, GT, GG, GA, and GC, and $X_3 X_4$ is selected from the group consisting of TA, TG, TC, AT, AA, AG, AC, CT, CC, CA, GT, GG, GA, and GC,

wherein the T-rich immunostimulatory nucleic acid is 8-100 nucleotides in length ~~and has a nucleotide composition of greater than 60% T.~~

2. - 4. (Cancelled)

5. (Currently Amended) The method of claim [[3]] 1, wherein the T-rich immunostimulatory nucleic acid comprises a plurality of poly T nucleic acid motifs.

6. - 14. (Cancelled)

15. (Original) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid comprises a nucleotide composition of greater than 80% T.

16. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid comprises at least 20 nucleotides.

17. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid comprises at least 24 nucleotides.

18. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid has a nucleotide backbone which includes at least one backbone modification.

19. (Original) The method of claim 18, wherein the backbone modification is a phosphorothioate modification.
20. (Original) The method of claim 18, wherein the nucleotide backbone is chimeric.
21. (Original) The method of claim 18, wherein the nucleotide backbone is entirely modified.
22. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid is free of CpG dinucleotides.
23. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid is free of unmethylated CpG dinucleotides.
24. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid is free of methylated CpG dinucleotides.
25. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid is free of poly-C sequences.
26. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid includes a poly-A sequence.
27. (Previously Presented) The method of claim 20, wherein the T-rich immunostimulatory nucleic acid includes a poly-G sequence.
28. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid comprises a nucleotide composition of greater than 25% C.
29. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid comprises a nucleotide composition of greater than 25% A.
30. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid is administered orally.

31. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid is administered locally.

32. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid is administered in a sustained release device.

33. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid is administered mucosally to a mucosal surface.

34. (Original) The method of claim 33, wherein the immune response is a mucosal immune response.

35. (Original) The method of claim 33, wherein the immune response is a systemic immune response.

36. (Original) The method of claim 33, wherein the mucosal surface is selected from the group consisting of an oral, nasal, rectal, vaginal, and ocular surface.

37. (Original) The method of claim 1, further comprising exposing the subject to an antigen and wherein the immune response is an antigen-specific immune response.

38. - 51. (Cancelled)

52. (Previously Presented) The method of claim 1, wherein the subject is a human.

53. (Previously Presented) The method of claim 1, wherein the subject is selected from the group consisting of a dog, a cat, horse, cow, pig, sheep, goat, chicken, monkey, and fish.

54. (Previously Presented) The method of claim 1, further comprising administering an antibody specific for a cell surface antigen, and wherein the immune response results in antibody dependent cellular cytotoxicity (ADCC).

55. - 76. (Cancelled)

77. (Currently Amended) The method of claim 1, wherein the immune response is an innate immune response ~~A method for inducing an innate immune response, comprising-~~

~~administering to the subject an immunostimulatory nucleic acid in an amount effective for activating an innate immune response, wherein the immunostimulatory nucleic acid is a T-rich immunostimulatory nucleic acid and wherein the T-rich immunostimulatory nucleic acid is 8-100 nucleotides in length and has a nucleotide composition of greater than 60% T .~~

78. – 84. (Cancelled)

85. (Previously Presented) The method of claim 5, wherein the T-rich immunostimulatory nucleic acid comprises at least 3, at least 4, at least 5, at least 6, at least 7, or at least 8 poly T nucleic acid motifs.

86. – 87. (Cancelled)

88. (Previously Presented) The method of claim 5, wherein the plurality of poly T nucleic acid motifs is at least 3 motifs.

89. (Previously Presented) The method of claim 5, wherein the plurality of poly T nucleic acid motifs is at least 4 motifs.

90. (Previously Presented) The method of claim 5, wherein at least one of the plurality of poly T nucleic acid motifs comprises at least 5, at least 6, at least 7, or at least 8 contiguous T nucleotide residues.

91. – 92. (Cancelled)

93. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid includes at least two poly C sequences.

94. – 97. (Cancelled)

98. (Previously Presented) The method of claim 90, wherein the plurality of poly T nucleic acid motifs are interspersed with CpG motifs.

99. – 106. (Cancelled)

107. (Currently Amended) The method of claim 1, wherein the immune response is a systemic immune response ~~A method of stimulating a systemic immune response comprising administering a T-rich immunostimulatory nucleic acid to a non-rodent subject in an amount effective to induce a systemic immune response in the non-rodent subject, wherein the T-rich immunostimulatory nucleic acid is 8-100 nucleotides in length and lacks a CpG motif .~~

108. (Currently Amended) The method of claim 1, further comprising administering an antibody specific for a cell surface antigen to the subject, wherein the immune response results in antibody dependent cellular cytotoxicity ~~A method of stimulating an immune response comprising administering a T-rich immunostimulatory nucleic acid to a non-rodent subject in an amount effective to induce an immune response in the non-rodent subject and an antibody specific for a cell surface antigen, wherein the immune response results in antibody dependent cellular cytotoxicity (ADCC), and wherein the T-rich immunostimulatory nucleic acid is 8-100 nucleotides in length and lacks a CpG .~~

109. (Previously Presented) The method of claim 108, further comprising administering an antigen to the subject.

110. (Previously Presented) The method of claim 1, wherein the T-rich immunostimulatory nucleic acid comprises a CpG motif.

111. (Previously Presented) The method of claim 77, wherein the T-rich immunostimulatory nucleic acid comprises a CpG motif.

112. (Currently Amended) The method of claim 1, wherein the immune response is an innate immune response ~~A method for inducing an innate immune response, comprising administering to the subject an immunostimulatory nucleic acid in an amount effective for activating an innate immune response, wherein the immunostimulatory nucleic acid is a T-rich immunostimulatory nucleic acid, and wherein the T-rich immunostimulatory nucleic acid is 8-100 nucleotides in length and lacks a CpG motif .~~

113. (New) A method for stimulating an immune response comprising administering an immunostimulatory nucleic acid to a non-rodent subject in an amount effective to induce an immune response in the non-rodent subject, wherein the immunostimulatory nucleic acid is 100% T, comprises at least one internucleotide modification, and is 8-100 nucleotides in length.

114. (New) The method of claim 113, wherein the immune response is an innate immune response.

115. (New) The method of claim 113, wherein the immune response is a systemic immune response.

116. (New) The method of claim 113, further comprising administering an antibody for a cell surface antigen to the subject, wherein the immune response results in antibody dependent cellular cytotoxicity (ADCC).

117. (New) The method of claim 113, wherein the nucleic acid is entirely phosphorothioated.

118. (New) A method of stimulating an immune response comprising administering an immunostimulatory nucleic acid that is a T-rich immunostimulatory nucleic acid to a non-rodent subject in an amount effective to induce an immune response in the non-rodent subject, wherein the T-rich immunostimulatory nucleic acid comprises



wherein $X_1 X_2$ is selected from the group consisting of TA, TG, TC, AT, AA, AG, AC, CT, CC, CA, GT, GG, GA, and GC, and X_3 and X_4 are nucleotides, and

wherein the T-rich immunostimulatory nucleic acid is 8-100 nucleotides in length and has a nucleotide composition of greater than 60% T.

119. (New) The method of claim 118, wherein the T rich immunostimulatory nucleic acid lacks an unmethylated CpG motif.

120. (New) A method of stimulating an immune response comprising administering an immunostimulatory nucleic acid that is a T-rich immunostimulatory nucleic acid to a non-rodent subject in an amount effective to induce an immune response in the non-rodent subject, wherein the T-rich immunostimulatory nucleic acid comprises



wherein $X_1 X_2$ is selected from the group consisting of TA, TG, TC, AT, AA, AG, AC, CT, CC, CA, CG, GT, GG, GA, and GC, wherein the CG is methylated, $X_3 X_4$ is selected from the group consisting of TA, TG, TC, AT, AA, AG, AC, CT, CC, CA, GT, GG, GA, and GC, and the nucleic acid is 8-100 nucleotides in length.